

Amendments to the Claims:

1. (Currently Amended) A method of detecting an activity of an antibiotic, in a sample, the method comprising the steps of:
(a) providing a microorganism in which a first endogenous gene encoding peptidyltransferase activity is inactivated, which activity is necessary for growth of the microorganism, and which activity can be complemented by a second, different, peptidyltransferase, which second peptidyltransferase is inducible in the microorganism by the presence of the antibiotic,
(b) contacting the sample with the microorganism, and
(c) observing the microorganism for growth, wherein growth of the microorganism is correlated with the presence of the antibiotic.
2. (Currently Amended) ~~A-The method of as claimed in~~ claim 1 wherein the antibiotic is a glycopeptide antibiotic which interferes with the physical integrity of the cell envelope.
3. (Currently Amended) ~~A-The method of as claimed in~~ claim 1 ~~or claim 2~~ wherein the second peptidyltransferase is endogenous.
4. (Currently Amended) ~~A-The method of as claimed in any one of the preceding claims~~ claim 1 wherein the peptidyltransferase activity is nonribosomal and operates on a substrate in the cell involved in cross-bridge formation of the microorganism cell wall.
5. (Currently Amended) ~~A-The method of as claimed in~~ claim 4 wherein the peptidyltransferase activity adds a single glycine to a stem pentapeptide substrate which can form a cross-bridge through D-ala transpeptidation.
6. (Currently Amended) ~~A-The method of as claimed in~~ claim 5 wherein the first peptidyltransferase acts on a stem pentapeptide substrate which terminates D-ala-D-ala.
7. (Currently Amended) ~~A-The method of as claimed in~~ claim 6 wherein the first endogenous gene encoding peptidyltransferase activity is *femX* (SC03904).
8. (Currently Amended) ~~A-The method as claimed in any one of claims 5 to 7~~ wherein the second peptidyltransferase acts on a stem pentapeptide substrate which terminates D-ala-D-lac.
9. (Currently Amended) ~~A-The method of as claimed in~~ claim 8 wherein the second peptidyltransferase is encoded by *vanF* (SC03593).
10. (Currently Amended) ~~A-The method as claimed in any one of claims 5 to 9~~ wherein the presence of the antibiotic in the sample induces additional enzymes which modify stem pentapeptide cell wall precursors such as to provide a substrate for the second peptidyltransferase.
11. (Currently Amended) ~~A-The method of as claimed in~~ claim 10 wherein the additional enzymes may be present in the same genomic cluster as the second peptidyltransferase.
12. (Currently Amended) ~~A-The method of as claimed in~~ claim 10 wherein the additional enzymes are vanHAX enzymes encoded by *vanH* (SC03594); *vanA* (SC03595); or *vanX* (SC03596).

13. (Currently Amended) ~~A-The method of as claimed in any one of the preceding claims claim 1 wherein the bacterium is an actinomycete.~~

14. (Currently Amended) ~~A-The method of as claimed in claim 13 wherein the bacterium is Streptomyces.~~

15. (Currently Amended) ~~A-The method of as claimed in claim 14 wherein the bacterium is Streptomyces coelicolor.~~

16. (Currently Amended) ~~A-The method of as claimed in claim 15 wherein the bacterium is Streptomyces coelicolor A3 (2).~~

17. (Currently Amended) ~~A-The method as claimed in any one of claims 2 to 16 wherein the microorganism is a strain in which enzymes which may otherwise degrade glycopeptidic antibiotics have been inactivated.~~

18. – 20. Canceled.

21. (Currently Amended) A process of producing a microorganism for use in ~~a-the method of any one of the preceding claims 1~~, which process comprises inactivating in the microorganism a first endogenous gene encoding peptidyltransferase activity, wherein said activity is necessary for growth of the microorganism, and wherein said activity can be substituted by a second, different, peptidyltransferase, which second peptidyltransferase is inducible in the microorganism by the presence of an antibiotic.

22. (Currently Amended) ~~A-The process of as claimed in claim 21 wherein the first endogenous gene encoding peptidyltransferase activity is inactivated by introducing therein a heterologous market sequence.~~

23. (Currently Amended) ~~A-The process of as claimed in claim 21 or claim 22 wherein the second peptidyltransferase is endogenous.~~

24. (Currently Amended) ~~A-The process of as claimed in claim 21 or claim 22 wherein the microorganism is transformed with a gene encoding the second peptidyltransferase.~~

25. (Currently Amended) A process of producing an isolated antibiotic which affects cell integrity, which method comprises the steps of:

- (a) performing a method according to ~~any one of claims 1 to 20~~ such as to identify the activity of the antibiotic in a sample, and
- (b) isolating the antibiotic from the sample.

26. (Currently Amended) ~~A-The process of as claimed in claim 25 which is preceded by the step of providing a transformed microorganism according to the process of ~~any one of claims 21 to 24~~.~~

27. (Currently Amended) A microorganism for use in ~~a-the method of any one of claims 1 to 20~~, which microorganism is characterized in that it includes a first endogenous gene encoding peptidyltransferase activity which is inactivated, which activity is necessary for growth of the microorganism, and which activity can be substituted by a second, different, peptidyltransferase, which second peptidyltransferase is inducible in the microorganism by the presence of the antibiotic.

28. (Currently Amended) A system for detecting an activity of an antibiotic in a sample comprising:

(a) the transformed microorganism of claim 27, and

(b) means for detecting the viability of the microorganism in the presence of the antibiotic.

29. (Currently Amended) A kit for performing ~~a~~ the method according to ~~any one of~~ claims 1 ~~to 20, which~~ wherein the kit comprises a preparation of the microorganism of claim 27, plus a further means for carrying out the contact or observation steps.